

- (34a)  $\text{meso-CH}_2\text{CH}_2(2\text{-MeInd})_2\text{ZrMe}_2$  and  $\text{rac-Me}_2\text{Si}(2\text{-Me-4-PhInd})_2\text{ZrMe}_2$  activated with N,N-dimethylanilinium tetrakis(pentafluorophenyl)boron and or triphenylcarbonium tetrakis(pentafluorophenyl)boron;
- (35)  $\text{meso-CH}_2\text{CH}_2(2\text{-MeInd})_2\text{ZrCl}_2$  and  $\text{rac-Me}_2\text{Si}(2\text{-MeInd})_2\text{ZrCl}_2$  activated with an alumoxane;
- (36)  $\text{meso-CH}_2\text{CH}_2(2\text{-MeInd})_2\text{ZrMe}_2$  and  $\text{rac-Me}_2\text{Si}(2\text{-MeInd})_2\text{ZrMe}_2$  activated with a non-coordinating anion activator;
- (36a)  $\text{meso-CH}_2\text{CH}_2(2\text{-MeInd})_2\text{ZrMe}_2$  and  $\text{rac-Me}_2\text{Si}(2\text{-MeInd})_2\text{ZrMe}_2$  activated with N,N-dimethylanilinium tetrakis(pentafluorophenyl)boron and or triphenylcarbonium tetrakis(pentafluorophenyl)boron;
- (37)  $\text{meso-Me}_2\text{Si}(2\text{-Me-4-PhInd})_2\text{ZrCl}_2$  and  $\text{rac-Me}_2\text{Si}(2\text{-Me-4-PhInd})_2\text{ZrCl}_2$  activated with an alumoxane;
- (38)  $\text{meso-Me}_2\text{Si}(2\text{-Me-4-PhInd})_2\text{ZrMe}_2$  and  $\text{rac-Me}_2\text{Si}(2\text{-Me-4-PhInd})_2\text{ZrMe}_2$  activated with a non-coordinating anion activator;
- (38a)  $\text{meso-Me}_2\text{Si}(2\text{-Me-4-PhInd})_2\text{ZrMe}_2$  and  $\text{rac-Me}_2\text{Si}(2\text{-Me-4-PhInd})_2\text{ZrMe}_2$  activated with N,N-dimethylanilinium tetrakis(pentafluorophenyl)boron and or triphenylcarbonium tetrakis(pentafluorophenyl)boron;
- (39)  $\text{meso-CH}_2\text{CH}_2(2\text{-Me-4-PhInd})_2\text{ZrCl}_2$  and  $\text{rac-CH}_2\text{CH}_2(2\text{-Me-4-PhInd})_2\text{ZrCl}_2$  activated with an alumoxane;

- (40)  $\text{meso-CH}_2\text{CH}_2(2\text{-Me-4-PhInd})_2\text{ZrMe}_2$  and  $\text{rac-CH}_2\text{CH}_2(2\text{-Me-4-PhInd})_2\text{ZrMe}_2$  activated with a non-coordinating anion activator;
- (40a)  $\text{meso-CH}_2\text{CH}_2(2\text{-Me-4-PhInd})_2\text{ZrMe}_2$  and  $\text{rac-CH}_2\text{CH}_2(2\text{-Me-4-PhInd})_2\text{ZrMe}_2$  activated with N,N-dimethylanilinium tetrakis(pentafluorophenyl)boron and or triphenylcarbonium tetrakis(pentafluorophenyl)boron;
- (41)  $\text{meso-CH}_2\text{CH}_2(2\text{-MeInd})_2\text{ZrCl}_2$  and  $\text{rac-CH}_2\text{CH}_2(2\text{-MePhInd})_2\text{ZrCl}_2$  activated with an alumoxane;
- (42)  $\text{meso-CH}_2\text{CH}_2(2\text{-MeInd})_2\text{ZrMe}_2$  and  $\text{rac-CH}_2\text{CH}_2(2\text{-MeInd})_2\text{ZrMe}_2$  activated with a non-coordinating anion activator;
- (42a)  $\text{meso-CH}_2\text{CH}_2(2\text{-MeInd})_2\text{ZrMe}_2$  and  $\text{rac-CH}_2\text{CH}_2(2\text{-MeInd})_2\text{ZrMe}_2$  activated with N,N-dimethylanilinium tetrakis(pentafluorophenyl)boron and or triphenylcarbonium tetrakis(pentafluorophenyl)boron;
- (43)  $\text{meso-CH}_2\text{CH}_2(\text{Ind})_2\text{ZrCl}_2$  and  $\text{rac-CH}_2\text{CH}_2(\text{Ind})_2\text{ZrCl}_2$  activated with an alumoxane;
- (44)  $\text{meso-CH}_2\text{CH}_2(\text{Ind})_2\text{ZrMe}_2$  and  $\text{rac-CH}_2\text{CH}_2(\text{Ind})_2\text{ZrMe}_2$  activated with a non-coordinating anion activator;
- (44a)  $\text{meso-CH}_2\text{CH}_2(\text{Ind})_2\text{ZrMe}_2$  and  $\text{rac-CH}_2\text{CH}_2(\text{Ind})_2\text{ZrMe}_2$  activated with N,N-dimethylanilinium tetrakis(pentafluorophenyl)boron and or triphenylcarbonium tetrakis(pentafluorophenyl)boron;
- (45)  $\text{meso-Me}_2\text{Si}(\text{Ind})_2\text{ZrCl}_2$  and  $\text{rac-Me}_2\text{Si}(\text{Ind})_2\text{ZrCl}_2$  activated with an alumoxane;

- (46) meso-Me<sub>2</sub>Si(Ind)<sub>2</sub>ZrMe<sub>2</sub> and rac-Me<sub>2</sub>Si(Ind)<sub>2</sub>ZrMe<sub>2</sub> activated with a non-coordinating anion activator;
- (46a) meso-Me<sub>2</sub>Si(Ind)<sub>2</sub>ZrMe<sub>2</sub> and rac-Me<sub>2</sub>Si(Ind)<sub>2</sub>ZrMe<sub>2</sub> activated with N,N-dimethylanilinium tetrakis(pentafluorophenyl)boron and or triphenylcarbonium tetrakis(pentafluorophenyl)boron;
- (47) meso-CH<sub>2</sub>CH<sub>2</sub>(Ind)<sub>2</sub>ZrCl<sub>2</sub> and rac-CH<sub>2</sub>CH<sub>2</sub>(4,7-Me<sub>2</sub>Ind)<sub>2</sub>ZrCl<sub>2</sub> (4,7-Me<sub>2</sub>Ind = 4,7-dimethylindenyl) activated with an alumoxane;
- (48) meso-CH<sub>2</sub>CH<sub>2</sub>(Ind)<sub>2</sub>ZrMe<sub>2</sub> and rac-CH<sub>2</sub>CH<sub>2</sub>(4,7-Me<sub>2</sub>Ind)<sub>2</sub>ZrMe<sub>2</sub> activated with a non-coordinating anion activator;
- (48a) meso-CH<sub>2</sub>CH<sub>2</sub>(Ind)<sub>2</sub>ZrMe<sub>2</sub> and rac-CH<sub>2</sub>CH<sub>2</sub>(4,7-Me<sub>2</sub>Ind)<sub>2</sub>ZrMe<sub>2</sub> activated with N,N-dimethylanilinium tetrakis(pentafluorophenyl)boron and or triphenylcarbonium tetrakis(pentafluorophenyl)boron;
- (49) meso-Me<sub>2</sub>Si(Ind)<sub>2</sub>ZrCl<sub>2</sub> and rac-CH<sub>2</sub>CH<sub>2</sub>(4,7-Me<sub>2</sub>Ind)<sub>2</sub>ZrCl<sub>2</sub> activated with an alumoxane;
- (50) meso-Me<sub>2</sub>Si(Ind)<sub>2</sub>ZrMe<sub>2</sub> and rac-CH<sub>2</sub>CH<sub>2</sub>(4,7-Me<sub>2</sub>Ind)<sub>2</sub>ZrMe<sub>2</sub> activated with a non-coordinating anion activator;
- (50a) meso-Me<sub>2</sub>Si(Ind)<sub>2</sub>ZrMe<sub>2</sub> and rac-CH<sub>2</sub>CH<sub>2</sub>(4,7-Me<sub>2</sub>Ind)<sub>2</sub>ZrMe<sub>2</sub> activated with N,N-dimethylanilinium tetrakis(pentafluorophenyl)boron and or triphenylcarbonium tetrakis(pentafluorophenyl)boron;

- (51)  $\text{meso-CH}_2\text{CH}_2(2\text{-MeInd})_2\text{ZrCl}_2$  and  $\text{rac-CH}_2\text{CH}_2(4,7\text{-Me}_2\text{Ind})_2\text{ZrCl}_2$   
(4,7-Me<sub>2</sub>Ind = 4,7-dimethylindenyl) activated with an alumoxane;
- (52)  $\text{meso-CH}_2\text{CH}_2(2\text{-MeInd})_2\text{ZrMe}_2$  and  $\text{rac-CH}_2\text{CH}_2(4,7\text{-Me}_2\text{Ind})_2\text{ZrMe}_2$  activated with a non-coordinating anion activator;
- (52a)  $\text{meso-CH}_2\text{CH}_2(2\text{-MeInd})_2\text{ZrMe}_2$  and  $\text{rac-CH}_2\text{CH}_2(4,7\text{-Me}_2\text{Ind})_2\text{ZrMe}_2$  activated with N,N-dimethylanilinium tetrakis(pentafluorophenyl)boron and or triphenylcarbonium tetrakis(pentafluorophenyl)boron;
- (53)  $\text{meso-Me}_2\text{Si}(2\text{-MeInd})_2\text{ZrCl}_2$  and  $\text{rac-CH}_2\text{CH}_2(4,7\text{-Me}_2\text{Ind})_2\text{ZrCl}_2$  activated with an alumoxane;
- (54)  $\text{meso-Me}_2\text{Si}(2\text{-MeInd})_2\text{ZrMe}_2$  and  $\text{rac-CH}_2\text{CH}_2(4,7\text{-Me}_2\text{Ind})_2\text{ZrMe}_2$  activated with a non-coordinating anion activator;
- (54a)  $\text{meso-Me}_2\text{Si}(2\text{-MeInd})_2\text{ZrMe}_2$  and  $\text{rac-CH}_2\text{CH}_2(4,7\text{-Me}_2\text{Ind})_2\text{ZrMe}_2$  activated with such as N,N-dimethylanilinium tetrakis(pentafluorophenyl)boron and or triphenylcarbonium tetrakis(pentafluorophenyl)boron;
76. The process of any of claims 55 to 75 wherein the second catalyst component comprises one or more of:  
dimethylsiladiyl(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium

dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl

dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;



dimethylsiladiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylsiladiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylsiladiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
dimethylsiladiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
dimethylsiladiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
9-silafluorendiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
9-silafluorendiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylsiladiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylsiladiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylsiladiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
dimethylsiladiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
dimethylsiladiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
9-silafluorendiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
9-silafluorendiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride

dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)  
<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium  
dichloride;  
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium  
dichloride;  
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium  
dichloride;  
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium  
dichloride;  
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>hafnium dichloride;  
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl

dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-isobutyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;  
dimethylsiladiyl(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;



dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylsiladiyl(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

9-silafluorendiyl(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

dimethylsiladiyl(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium  
dimethyl;  
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium  
dimethyl;  
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium  
dimethyl;  
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium  
dimethyl;  
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium  
dimethyl;  
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium  
dimethyl;  
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium  
dimethyl;  
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium  
dimethyl;  
dimethylsiladiyl(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium  
dimethyl;  
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium  
dimethyl;  
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium  
dimethyl;  
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium  
dimethyl;  
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium  
dimethyl;  
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium  
dimethyl;  
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium  
dimethyl;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

9-silafluorendiyl(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dichloride;

9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>hafnium dimethyl;

dimethylsiladiyl(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  
η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  
η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  
η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-  
diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-  
diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl) η<sup>4</sup>-1,4-  
diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-  
diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-  
diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-  
diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-  
diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-  
diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-  
diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-  
diphenyl-1,3-butadiene;  
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-  
diphenyl-1,3-butadiene;

dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl) η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;



9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylamidoborane(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylamidoborane(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylamidoborane(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylamidoborane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylamidoborane(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

dimethylamidoborane(2-n-propyl, 4-[3',5'-diphenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-iso-propyl, 4-[3',5'-diphenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-n-butyl, 4-[3',5'-diphenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-iso-butyl, 4-[3',5'-diphenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-sec-butyl, 4-[3',5'-diphenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-tert-butyl, 4-[3',5'-diphenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
dimethylamidoborane(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
dimethylamidoborane(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
dimethylamidoborane(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
dimethylamidoborane(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
dimethylamidoborane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

dimethylamidoborane(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;

dimethylamidoborane(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;

dimethylamidoborane(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;

dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;

dimethylamidoborane(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;

dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;

dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;

dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;

dimethylamidoborane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
dimethylamidoborane(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylamidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylamidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

diisopropylamidoborane(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

diisopropylamidoborane(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

diisopropylamidoborane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;



diisopropylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
diisopropylamidoborane(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

diisopropylamidoborane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

diisopropylamidoborane(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

diisopropylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;

diisopropylamidoborane(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

diisopropylamidoborane(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-  
tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-ethyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-n-propyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-n-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-tert-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-ethyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

diisopropylamidoborane(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-  
tbutylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dichloride;  
bis(trimethylsilyl)amidoborane(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  
 $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  
 $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;

bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-  
tbutylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>  $\eta^4$ -1,4-diphenyl-1,3-butadiene;



bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub> η<sup>4</sup>-1,4-diphenyl-1,3-butadiene;  
bis(trimethylsilyl)amidoborane(2-methyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-tbutylphenyl]indenyl)<sub>2</sub> zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-  
tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-  
tbutylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-bis-  
trifluoromethylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-iso-  
propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl;  
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl; or  
bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl.

77. The process of any of claims 55 to 75 wherein the second catalyst component comprises one or more of  
bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)<sub>2</sub>zirconium dimethyl.
78. A continuous process to prepare an adhesive comprising:
- 1) combining monomer, solvent, catalyst and activator in a reactor system,
  - 2) withdrawing polymer solution from the reactor system,
  - 3) removing at least 10% solvent from the polymer solution,
  - 4) quenching the reaction,

- 5) devolatilizing the polymer solution to form molten polymer,
  - 6) combining the molten polymer and one or more additives in a static mixer,
  - 7) removing the polymer combination from the static mixer, and
  - 8) pelletizing or drumming the polymer combination.
79. A continuous process to produce a branched olefin polymer comprising:
- 1) selecting a first catalyst component capable of producing a polymer having an Mw of 80,000 or less and a crystallinity of 15% or less under selected polymerization conditions;
  - 2) selecting a second catalyst component capable of producing polymer having an Mw of 80,000 or less and a crystallinity of 50% or more at the selected polymerization conditions;
  - 3) contacting the catalyst components in the presence of one or more activators with propylene and one or more C4 to C20 olefins, and, optionally one or more C4 to C20 diolefins;
  - 4) at a temperature of greater than 105°C;
  - 5) at a residence time of 120 minutes or less;
  - 6) wherein the ratio of the first catalyst to the second catalyst is from 1:1 to 20:1;
  - 7) wherein the activity of the catalyst components is at least 100 kilograms of polymer per gram of the catalyst compounds; and wherein at least 80% of the olefins are converted to polymer.
80. The process of claim 79 wherein:
- a) the olefins comprise propylene and one or more of butene, pentene, hexene, heptene, octene; nonene, decene, dodecene; and
  - b) the temperature is greater than 110°C; and
  - c) the residence time is 60 to 120 minutes; and

- d) the ratio of the first catalyst to the second catalyst is from 1:1 to 1:10.
81. The process of claim 79 or 80 wherein the diolefin is present and is selected from the group consisting of 1,6-heptadiene, 1,7-octadiene, 1,8-nonadiene, 1,9-decadiene, 1,10-undecadiene, 1,11-dodecadiene, 1,12-tridecadiene, 1,13-tetradecadiene, cyclopentadiene, vinylnorbornene, norbornadiene, ethylidene norbornene, divinylbenzene, dicyclopentadiene, polybutadienes having an Mw less than 1000 g/mol, butadiene, pentadiene, hexadiene, pentadecadiene, hexadecadiene, heptadecadiene, octadecadiene, nonadecadiene, icosadiene, heneicosadiene, docosadiene, tricosadiene, tetracosadiene, pentacosadiene, hexacosadiene, heptacosadiene, octacosadiene, nonacosadiene, triacontadiene, cyclopentadiene, vinylnorbornene, norbornadiene, ethylidene norbornene, divinylbenzene, dicyclopentadiene, or combinations thereof.
82. The process of claim 79, 80 or 81 wherein the olefin comprises propylene and one or more of butene, pentene, hexene, heptene, octene, nonene, decene, dodecene, 4-methyl-pentene-1, 3-methyl pentene-1, and 3,5,5-trimethyl-hexene-1.
83. A continuous process to make an adhesive comprising
- 1) selecting a first catalyst component capable of producing a polymer having an Mw of 100,000 or less and a crystallinity of 5% or less under selected polymerization conditions;
  - 2) selecting a second catalyst component capable of producing polymer having an Mw of 100,000 or less and a crystallinity of 20% or more at the selected polymerization conditions;
  - 3) contacting, in a solvent and in a reaction zone under the selected polymerization conditions, the catalyst components in the presence

of one or more activators with one or more C3 to C40 olefins, and, optionally one or more diolefins;

- 4) at a temperature of greater than 100°C;
- 5) at a residence time of 120 minutes or less;
- 6) wherein the ratio of the first catalyst to the second catalyst is from 1:1 to 50:1;
- 7) wherein the activity of the catalyst components is at least 50 kilograms of polymer per gram of the catalyst compounds; and wherein at least 80% of the olefins are converted to polymer;
- 8) withdrawing polymer solution from the reaction zone;
- 9) removing at least 10% solvent from the polymer solution;
- 10) quenching the reaction;
- 11) devolatilizing the polymer solution to form molten polymer;
- 12) combining the molten polymer and one or more additives in a static mixer;
- 13) removing the polymer combination from the static mixer; and
- 14) pelletizing or drumming the polymer combination.

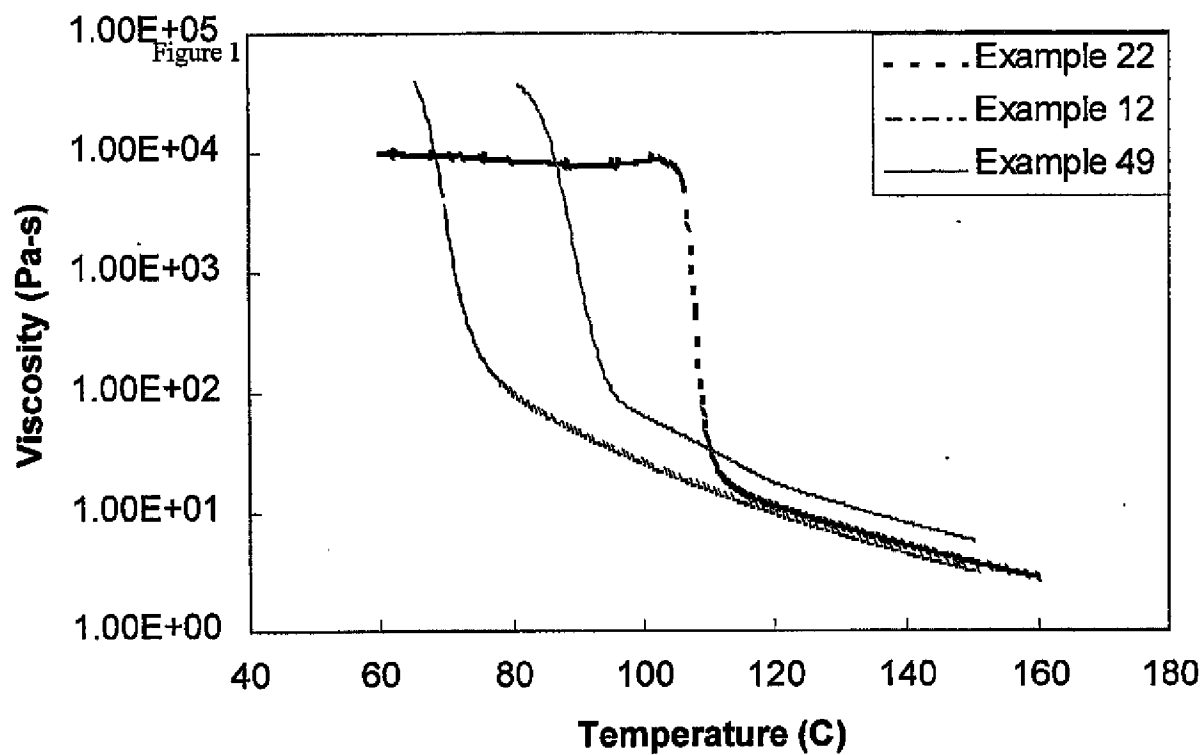
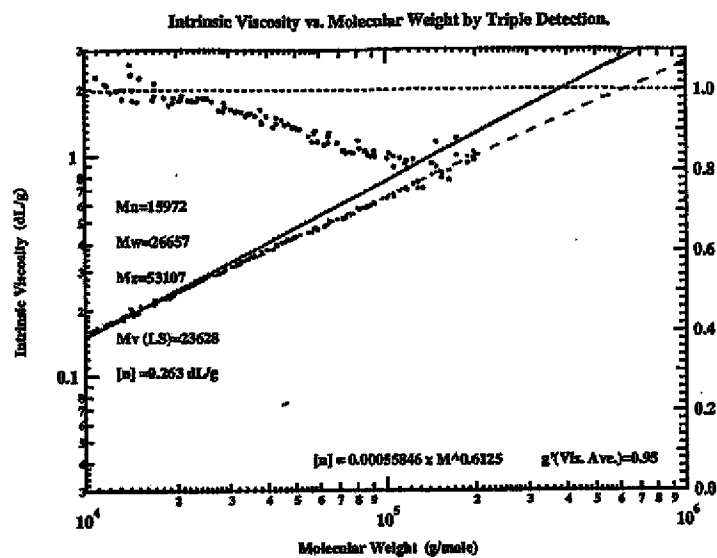


Figure 1

## Example 4



## Example 31

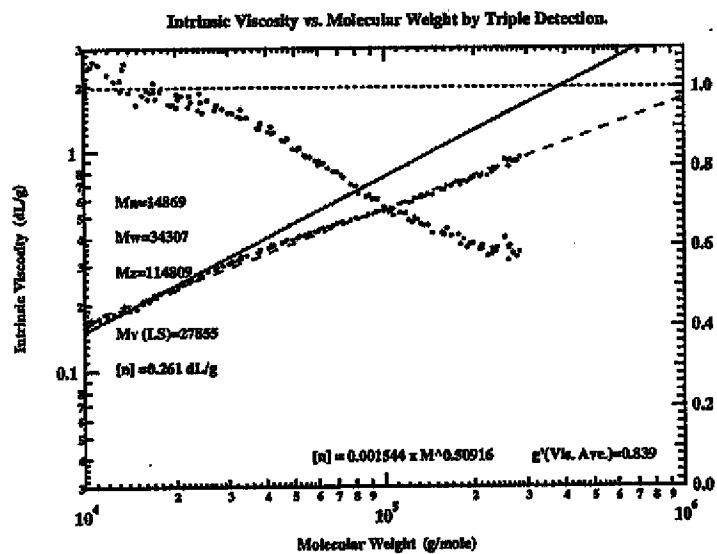


Figure 2



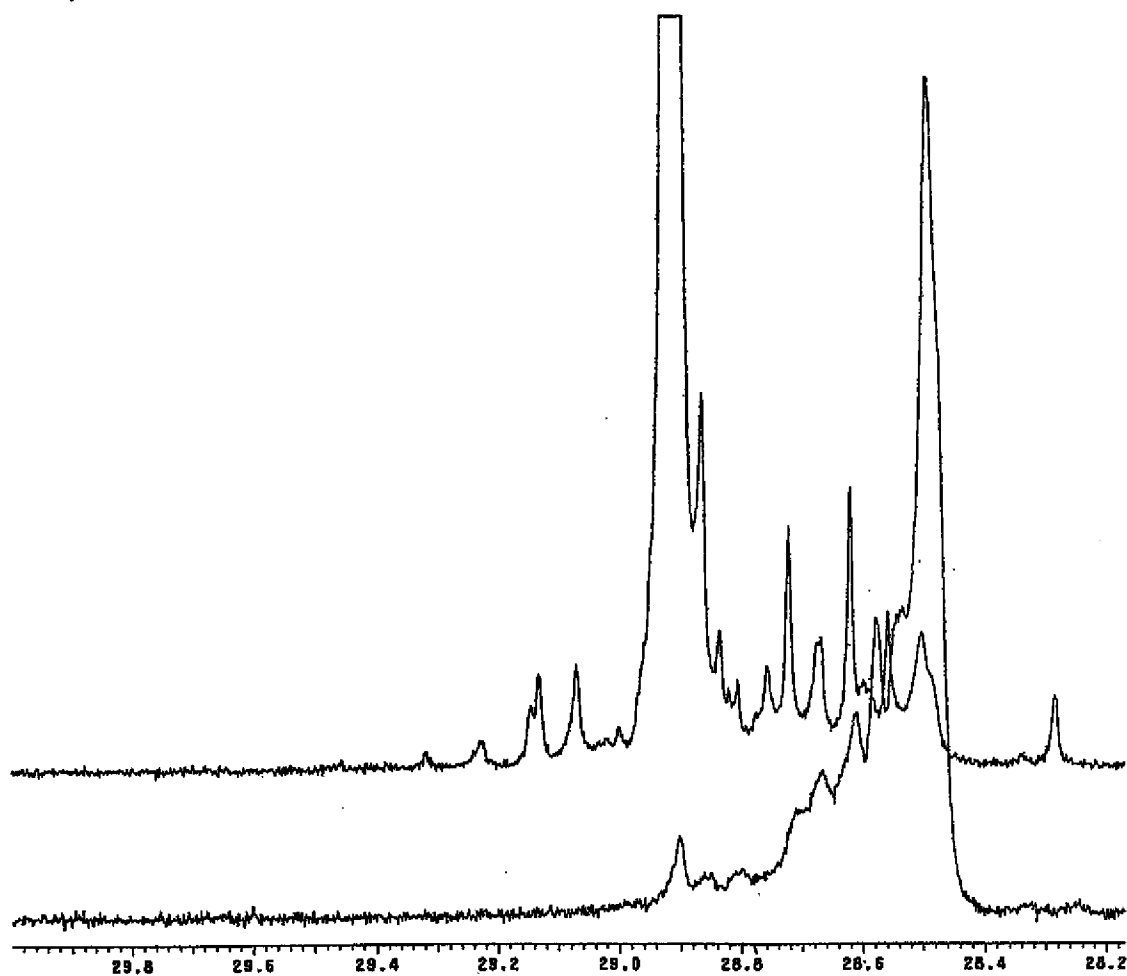


Figure 3

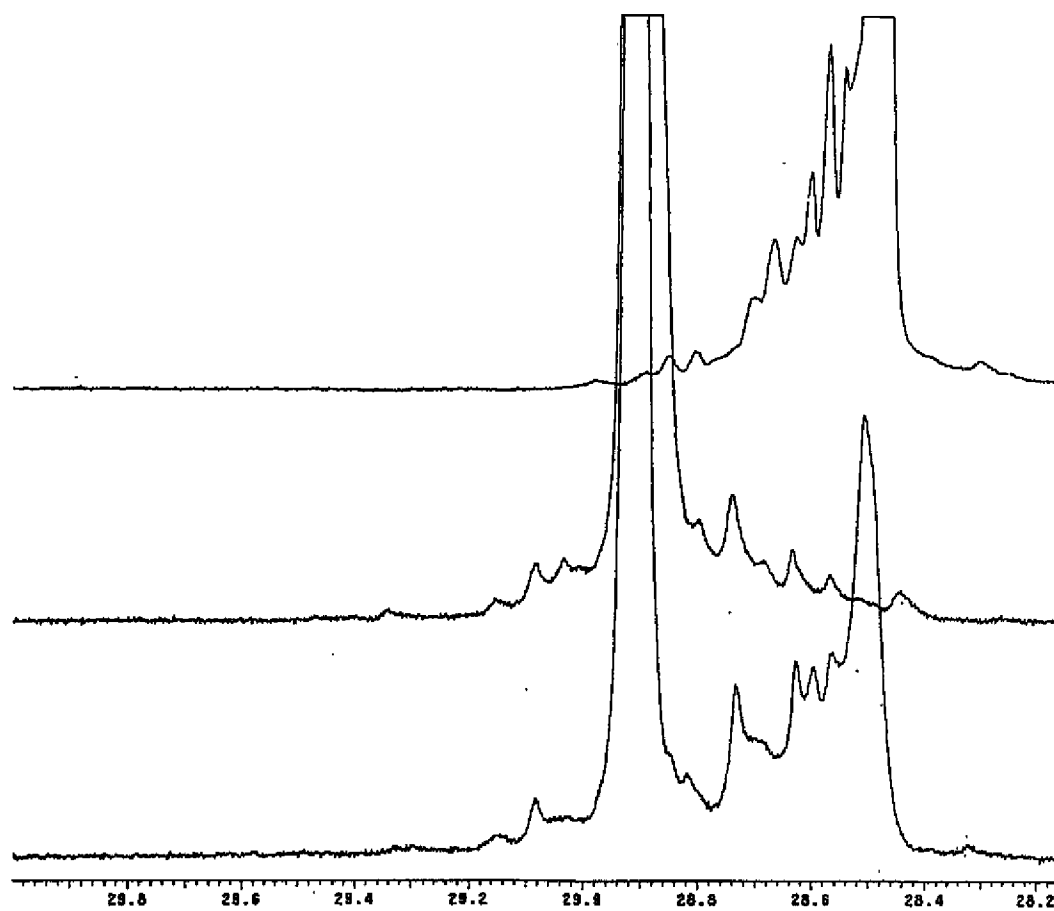


Figure 4

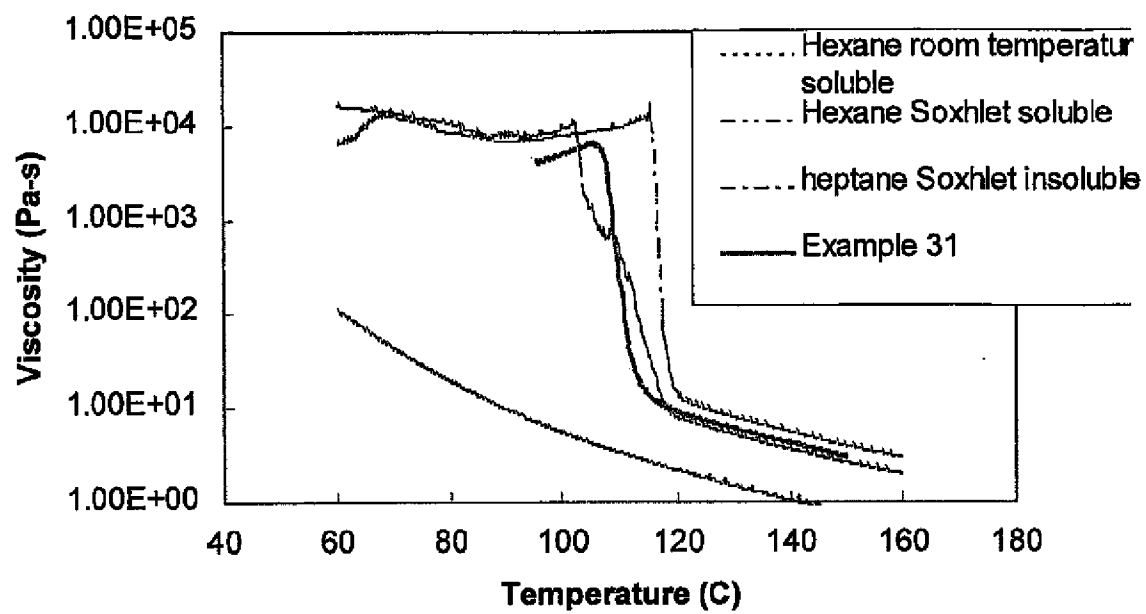
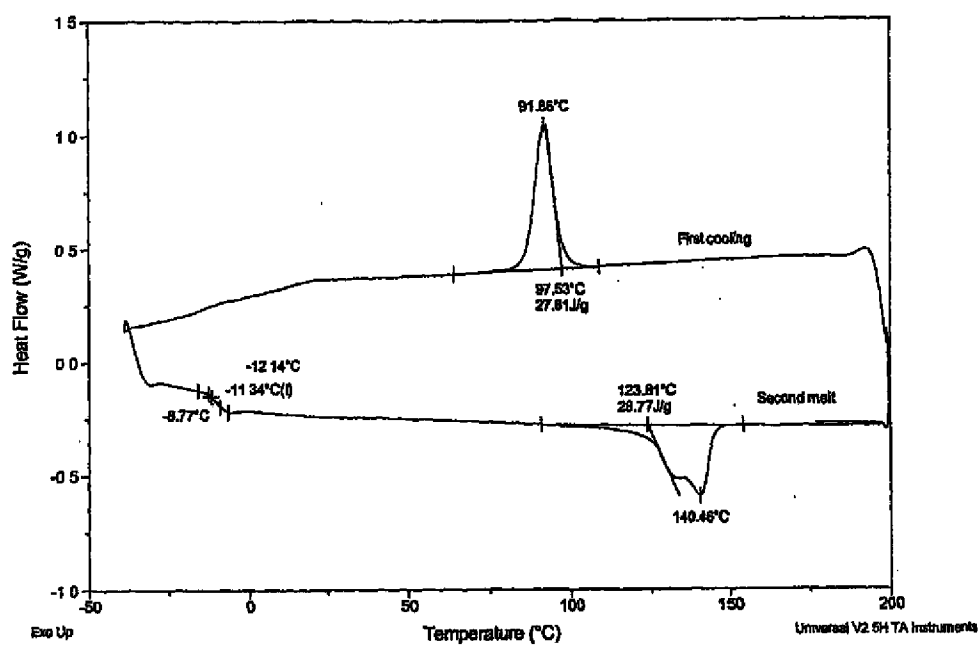


Figure 5

FIGURE 6

Example 32 in Table 6



SUBSTITUTE SHEET (RULE 26)